



State of New Hampshire  
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095  
(603) 271-3406 FAX (603) 271-7894



January 5, 2001

**Letter of Deficiency**  
DAM #108.05  
DAM #108.06

Mr. Jim Stone  
Superintendent  
Hanover Water Works  
Box 1006  
Hanover, NH 03755

RE: Lower Reservoir Dam #108.05 and Upper Reservoir Dam #108.06, Hanover

Dear Mr. Stone:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that plays a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on June 29, 2000. During the visual inspections and/or file reviews, the following deficiencies were observed:

**DAM #108.05 Lower Reservoir Dam**

1. There was minor cracking and efflorescence on the spillway walls;
2. There was no operation and maintenance plan on file with the DES; and
3. The Emergency Action Plan (EAP) needs to be updated and tested.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

**February 1, 2001:**

1. Prepare and submit to the DES a written operational procedure plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact personnel;

Update and test the EAP and submit for review by DES. This is an annual requirement of the NH Dam Safety Rules; and

**On a continual basis:**

3. Monitor and repair as necessary, cracking and spalling concrete spillway walls.

**DAM #108.06 Upper Reservoir Dam**

1. There was minor seepage at the toe of the concrete spillway;

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2. There were minor sinkholes on the crest of the dam along the exterior left spillway-training wall;
3. There were rodent holes observed in the downstream embankment slope, approximately 100 feet to the left of the spillway;
4. There was no operation and maintenance plan on file with the DES; and
5. The Emergency Action Plan (EAP) needs to be updated and tested.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

**February 1, 2001:**

1. Prepare and submit to the DES a written operational procedure plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact personnel;
2. Update and test the EAP and submit for review by DES. This is an annual requirement of the NH Dam Safety Rules;

**July 1, 2001:**

3. Fill, compact and revegetate the sinkholes along the exterior of the left spillway-training wall;
4. Remove rodents, fill and compact holes; and

**On a continuing basis:**

5. Monitor the seepage noted at the toe of the concrete spillway slab.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

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If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely,

  
**COPY**  
Grace E. Levergood, P.E.  
Dam Safety Engineer

Attachments Guideline for an O&M plan, DB13

cc: Gretchen Rule ✓

Town of Hanover

Certified # 7099 3400 0002 9772 8922

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